

# UNIVERSIDADE PRESBITERIANA MACKENZIE





## **Course Syllabus**

Department/Faculty: School of Engineering  Graduate Program: Materials Engineering and Nanotechnology			
Course Name: Scientific Research Met	hodology		
<b>Professor:</b> Prof. Dr. Christiano J. S	. de Matos		
Office hours 48			
Course Overview:			

In this module, we will discuss essential elements for the development of a researcher at the master's and/or doctoral level, which complement research activities. The main focus is on analysing the structure of scientific texts (such as research articles and project proposals), with the aim of developing the necessary skills for writing these texts. In addition, we will explore the concept of good scientific practices and the use of various tools to support bibliographic research and academic writing.

# **Topics outline**

- 1. Introduction to tools for supporting bibliographic research and scientific writing
- 2. Analysis of the structure of scientific articles, identifying their key components
- 3. Discussion of the elements of a scientific research proposal
- 4. Writing and analysis of a scientific proposal related to the student's research project
- 5. Discussion on the writing of scientific reports
- 6. Discussion of good practices for ethical and collaborative research

## **Letter Grade Assignment**

Grade A (Excellent) - Grade points between 9 and 10

Grade B (Good) - Grade points between 8 and 8.9

Grade C (Satisfactory) - Grade points between 7 and 7.9

Grade D (Unsatisfactory) - Grade points between 0 and 6.9



## UNIVERSIDADE PRESBITERIANA MACKENZIE

Pró-Reitoria de Pesquisa e Pós-Graduação Coordenadoria Geral de Pós-Graduação Stricto Sensu



# Texts, Materials, and supplies

## **Basic Bibliography:**

- NATIONAL ACADEMY OF SCIENCES; NATIONAL ACADEMY OF ENGINEERING; INSTITUTE OF MEDICINE. On Being a Scientist: A Guide to Responsible Conduct in Research. 3rd ed. Washington, D.C.: National Academy Press, 2009.
- Scientific articles provided by the students
- Postgraduate Programme Scholarship Announcements
- Guidelines for Submission and Selection of Proposals for the Master's Scholarship Programme - FAPESP

## Supplementary Bibliography:

Schuster, E.; Levkowitz, H.; Oliveira Jr., O. N. Writing Scientific Papers in English Successfully: Your Complete Roadmap. Hyprtek.Com, Inc., 2014.